**CLAIMS**

1.    A digital signal processing apparatus to estimate loading in
a spread spectrum wireless communication system, comprising the steps of:
   receive circuitry; and
   processor communicatively coupled to the receive circuitry, the
      processor capable of executing commands and data to
      estimate loading of the system by:
         determining frequency reuse of the system; and
         determining loading of the system as a function of the
         frequency reuse.

2.    The apparatus of claim 1, wherein determining the
frequency reuse of the system, comprises determining a power associated with
voice activity to determine the frequency reuse.

3.    The method of claim 2, wherein determining the frequency
      reuse of the system is an iterative process.

4.    The method of claim 3, wherein the frequency reuse
$F_k(n+1)$ is calculated as:

$$F_k(n+1) = \frac{P(n)}{P_t - N_o W}$$

   wherein Pt is total power received at receive circuitry, P is the
power of spread spectrum frames, and $N_0 W$ represents background noise
received at the base station.

5.    The apparatus of claim 4, wherein the loading is
determined in accordance with the following equation:

$$L = \frac{1}{F_k} \sum_{i=1}^{N} \frac{v_i x_i}{W/R_i + \frac{1}{F_k} v_i x_i}$$

   where $F_k$ is the converged frequency reuse efficiency value, $v_i$
corresponds to a voice activity factor, $R_i$ is the data rate of a user of the
communication system, and $x_i$ is the energy per bit to noise power spectral
density of a reverse traffic channel in the communication system.

6.    The apparatus of claim 5, wherein the voice activity factor is equal to one indicating a data communication.

7.    A digital signal processing apparatus to process communications in a spread spectrum wireless communication system, comprising the steps of:
    receive circuitry; and
    processor communicatively coupled to the receive circuitry, the processor capable of executing commands and data to estimate loading of the system by:
        determining frequency reuse of the system;
        determining loading of the system as a function of the frequency reuse; and
        determining admission of calls received at the receive circuitry based on the loading.

8.    The apparatus of 8, wherein determining admission comprises accepting a new call when the loading is a first value and rejecting a new call when the loading is a second value.

9.    The method of claim 8, wherein when the loading the second value, rescheduling the new call.

10.    The method of claim 7, wherein the is used to schedule calls within the system.

11.    A computer-readable medium, storing:
        a first set of instructions for determining frequency reuse of the system;
        a second set of instructions for determining loading of the system as a function of the frequency reuse; and
        a third set of instructions determining admission of new calls.

12.    A system for monitoring the load on a CDMA communication system, comprising:
        means for determining frequency reuse of the system;
        means for determining loading of the system as a function of the frequency reuse; and

6                              means for determining admission of new calls.